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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/641,352	08/13/2003	Junichi Ishibashi	03482/LH	1190

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FRISHAUF, HOLTZ, GOODMAN & CHICK, PC
220 5TH AVE FL 16
NEW YORK, NY 10001-7708

EXAMINER	
KIM, WESLEY LEO	

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/641,352	ISHIBASHI ET AL.	
	Examiner	Art Unit	
	Wesley L. Kim	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8,10,12,15-21,24,26,28,31 and 32* is/are rejected.

7)☒ Claim(s) *6,7,9,11,13,14,22,23,25,27,29, and 30* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/13/03, 11/21/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Cellular telephone with display providing picture upon removal of operation means.

Allowable Subject Matter

1. Claims 6, 7, 9, 11, 13, 14, 22, 23, 25, 27, 29, 30 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

   Reason for objection:

   - Claim 6 and 22 establishes the phone main body has a first attaching position in which the operation means is attached onto a surface side of the phone main body, and a second attaching position in which the operation means is attached onto a rear surface side of the phone main body in a state detached from the phone main body. Claims 7 and 23 objected to due to dependency on Claims 6 and 22.
   - Claim 9 and 25 establish an attaching/detaching detection means for detecting presence/absence of the attaching/detaching of the operation means with respect to the phone main body; and switch means for switching

display driving of the first and second display means based on a signal of the attaching/detaching detection means.

- Claim 11 and 27 establishes a sentence edition recording means including both a temporary memory in which only a part is recorded at a sentence input time and an all sentence memory in which all sentences are recorded, wherein the first display means displays the data of the temporary memory, and the second display means simultaneously displays the data of the all sentence memory.
- Claim 13 and 29 establish the operation means comprises capacitance use input means for performing an instruction operation for the second display means on a rear surface side of an operation surface; and conversion means for converting the a signal of the capacitance use input means into a signal to be transferred, and the phone main body comprises: instruction operation processing means for transferring the signal to be transferred converted by the conversion means by the transmission/reception means to perform an instruction operation process of the second display means.
- Claim 14 and 30 establish the operation means comprises cross operation key means for performing an instruction operation of the second display means on a rear surface side of an operation surface of the operation means; and conversion means for converting a signal outputted from the cross operation key means into a signal to be transferred, and the phone main body comprises: instruction operation processing means for transferring the signal

to be transferred converted by the conversion means by the transmission/reception means to perform an instruction operation process of the second display means.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (U.S. Pub. 2001/0011030 A1) in view of Mark et al (U.S. Pub 2002/0082042 A1).

Regarding **Claims 1 and 17**, Kuroda teaches A cellular phone comprising (Fig.1): voice communication means for transmitting and receiving data concerning voice communication and carrying out voice communication (Par.23; a portable radio device inherently comprises voice communication means for transmitting and receiving data); information communication means for transmitting and receiving data concerning information communication and carrying out information communication (Par.6; a portable radio device which permits users to use contents on the internet inherently has an information communication means for transmitting and receiving data concerning information communication) which is different from voice communication; first display means

disposed in a phone main body, for displaying the data concerning voice communication (Fig.1;5); second display means for enlarging and displaying details of the data concerning information communication (Par.26 and Par.27;6-10); however Kuroda **is silent on** operation means, removably attached to the phone main body, for inputting instructions including characters; and transmission/reception means for transmitting/receiving information between the operation means and the phone main body; and data concerning information communication different from voice communication includes an image.

Mark et al teaches operation means, removably attached to the phone main body, for inputting instructions including characters (Par.2 – Par.4); and transmission/reception means for transmitting/receiving information between the operation means and the phone main body (Par.16).

The examiner takes **Official Notice** that it is well known in the art that the data concerning information communication includes a picture. One of ordinary skill in the art would find it obvious that information downloaded from the Internet might include picture(s).

It would have been obvious to one of ordinary skill in the art to modify Kuroda, such that an operation means may be removably attached to the phone main body for inputting instructions including characters with a transmission/reception means for transmitting/receiving information between the operation means and the phone main body; and data concerning information

communication includes an image, to provide a comfortable spatial relationship between the two parts for inputting data and viewing the image.

Regarding **Claim 2 and 18**, the combination as discussed above teaches all the limitations as recited in claim 1, and Kuroda further teaches the second display means comprises a display section surface rotatably disposed in an attaching section in the phone main body (Par.26;3-6, the display section surface (1b) is within the body of the phone), and further comprises structure means for containing the second display means in the phone main body, when the operation means is attached to the phone main body (Fig.1;1, when the operation means(1) is attached to the body the second display means(1b and 2) is contained in the main body) and for rotating the display part surface to set the second display means in a state position in which the display is possible, when the operation means is detached from the phone main body (Par.27;6-10 and Fig.2; when the operation means(1) is detached from the main body the second display means is in a state position in which the display is possible).

2. Claims 3, 4, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (U.S. Pub. 2001/0011030 A1) and Mark et al (U.S. Pub 2002/0082042 A1) in further view of Li et al (U.S. Patent 6637896 B2).

Regarding **Claim 3, 4, 19, and 20**, Kuroda and Mark et al teach all the limitations as recited in claim 2 and 18, and Kuroda further teaches the second display means comprises: a projection display section disposed in the phone

main body (Fig.2;2); and a magnification reflective mirror section which is rotatably disposed in the attaching section in the phone main body (Fig.2;1b and Par.26;6 the display is in the phone main body until the operation means is removed from the phone main body), and the structure means folds and contains the magnification reflective mirror section in the phone main body, when the operation means is attached to the phone main body (Fig.1, it can be seen that when the operation means(1) is attached to the phone main body, the magnification reflective mirror section is folded and contained within the phone main body), however the combination **is silent on** the surface of the magnification reflective mirror section set into a state position opposite to the projection display section, when the operation means is detached from the phone main body.

Li et al teaches the surface of the magnification reflective mirror section set into a state position opposite to the projection display section (Fig.5;510 and 520).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuroda and Mark et al, such that the surface of the magnification reflective mirror section set into a state position opposite to the projection display section, when the operation means is detached from the phone main body, to provide a method for holding the mirror section and the optical projector relative to one another such that the light emitted from the optical projector forms a real image on the mirror.

With further regards to ***Claim 4***, Li et al teaches the screen may be either reflective or transmissive for viewing from either the front or the back of the optical projector (Col.3;27-31), therefore it is inherent the display section may be comprised of a direct view type magnification optical section opposite the display section.

Li et al further teaches the display section and magnification optical section may be contained in the body and folded out to a predetermined angle from the surface of the main body to make display possible (Fig.7, it is obvious from the figure that the display section(410) is set at a certain angle from the main body and the magnification optical section(320) is also set at a certain angle, which could have been predetermined).

Regarding **Claim 5,** Kuroda and Mark et al teach all the limitations as recited in claim 1, and Kuroda further teaches the second display means comprises: a display section (Fig.2;2); and the structure means contains the magnification optical section in the phone main body (Fig.2;1b and Par.26;6 the display is in the phone main body until the operation means is removed from the phone main body), when the operation means is attached to the phone main body, however the combination **is silent on** the direct view type magnification optical section set in a display state position distant from the display surface of the display section by a predetermined interval, when the operation means is detached from the phone main body; and a direct view type magnification optical section disposed opposite to the display section.

Li et al teaches the surface of the magnification reflective mirror section set into a state position opposite to the projection display section (Fig.5;510 and 520).

Li et al teaches the screen may be either reflective or transmissive for viewing from either the front or the back of the optical projector (Col.3;27-31), therefore it is inherent the display section may be comprised of a direct view type magnification optical section opposite the display section.

Li et al further teaches the direct view type magnification optical section set in a display state position distant from the display surface of the display section by a predetermined interval, when the operation means is detached from the phone main body (Fig.7, it is obvious from the figure that the display section(410) is set at a certain distance from the direct view type magnification optical section(320), which could have been predetermined).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuroda and Mark et al, such that the surface of the magnification optical section is set a certain distance from a state position opposite to the projection display section, when the operation means is detached from the phone main body, to provide a method for holding the mirror section and the optical projector relative to one another such that the light emitted from the optical projector forms a real image on the mirror.

3. Claims 8 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (U.S. Pub. 2001/0011030 A1) and Mark et al (U.S. Pub 2002/0082042 A1) in further view of Miyashita (U.S. Pub 2005/0059441 A1).

Regarding **Claim 8, 16, 24, and 32**, Kuroda and Mark et al teach all the limitations as recited in claim 1, however the combination **is silent on** an attaching detection means for detecting presence/absence of the attaching of the operation means with respect to the phone main body; function key means for associating and allocating input keys of the operation means with respect to a plurality of different function operations; and selection means for switching an allocation to a function input key allocation from a text input key allocation by a signal of the attaching detection means.

Miyashita teaches detection of presence/absence of the operation means with respect to the phone main body (Fig.6;S151) and if connected then the operation means functions in a normal input mode otherwise the operation means functions in a mouse mode (Fig.6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuroda and Mark et al, such that an attaching detection means for detecting presence/absence of the attaching of the operation means with respect to the phone main body; function key means for associating and allocating input keys of the operation means with respect to a plurality of different function operations; and selection means for switching an allocation to a function input key allocation from a text input key allocation by a signal of the attaching

detection means, to provide a means for improving the operability of data entry of a mobile device without noticeably changing the size of the portable device.

With further regards to ***Claim 16 and 32***, Miyashita teaches the operation means to be mouse however Miyashita **is silent on** the mouse being optical, however it is well known in the art that optical mouses exist.

4. Claims 10 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (U.S. Pub. 2001/0011030 A1) and Mark et al (U.S. Pub 2002/0082042 A1) in further view of Cachard (Japanese Patent JP 11-331331 A).

Regarding **Claims 10 and 26**, Kuroda and Mark et al teach all the limitations as recited in claim 1, however the combination **is silent on** an attaching/detaching detection means for detecting presence/absence of the attaching/detaching of the operation means with respect to the phone main body; and means for starting or ending a communication procedure process of the information communication means based on a signal of the attaching/detaching detection means.

Cachard teaches a mobile phone that detects whether or not a keyboard or flap is connected to the body of the handset, and if not connected the handset is made non-operational (Translated Abstract).

5. Claims 12 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (U.S. Pub. 2001/0011030 A1) and Mark et al (U.S. Pub 2002/0082042 A1) in further view of Adriaenssens et al (U.S. Patent 4871997).

Regarding **Claims 12 and 28**, Kuroda and Mark et al teach all the limitations as recited in Claim 1, however the combination **is silent on** the transmission/reception means comprises: radio wave intensity detection means for detecting intensity of a signal transmitted from the operation means; critical radio wave intensity indication means for indicating a predetermined critical radio wave intensity; radio wave intensity comparison means for comparing an intensity of an output signal from the radio wave intensity detection means with that of the output signal of the critical radio wave intensity indication means; and warning means for issuing a warning, when the intensity of the output signal from the radio wave intensity detection means is lower than that of the output signal from the critical radio wave intensity indication means in the radio wave intensity comparison means.

Adraienssens et al teaches a radio frequency proximity sensing apparatus comprising a receiver having a sensor sircuit for the detection of the propagated pulsed RF signal and for processing the signal and actuates an alarm upon the receiver and transmitter being separated by a distance exceeding the effective RF signal range of the transmitter.

It would have been obvious to one ordinary skill in the art at the time of the invention to modify Kuroda and Mark et al, such that radio wave intensity

detection means for detecting intensity of a signal transmitted from the operation means; critical radio wave intensity indication means for indicating a predetermined critical radio wave intensity; radio wave intensity comparison means for comparing an intensity of an output signal from the radio wave intensity detection means with that of the output signal of the critical radio wave intensity indication means; and warning means for issuing a warning, when the intensity of the output signal from the radio wave intensity detection means is lower than that of the output signal from the critical radio wave intensity indication means in the radio wave intensity comparison means, to provide a method of alerting the user that the operation means has traveled outside of the effective RF signal range of the transmitter.

6. Claims 12 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda (U.S. Pub. 2001/0011030 A1) and Mark et al (U.S. Pub 2002/0082042 A1) in further view of Morita et al (Japanese Patent 05-176039).

Regarding **Claim 15 and 31**, Kuroda and Mark et al teach all the limitations as recited in Claim 1, however the combination **is silent on** operation means comprises: pattern code reader means for reading a binary pattern code; and conversion means for converting read signal information read by the pattern code reader means into a signal to be transferred, and the phone main body comprises: decode means for transferring the signal to be transferred converted

by the conversion means to the phone main body by the transmission/reception means to decode-process the signal to be transferred as a pattern code signal.

Morita et al teaches a slave unit (i.e. operation means) of a main phone body with a bar code reading section, which reads bar-coded telephone numbers and the telephone is stored and retrieved from the main phone body and used to place a call (Abstract and Fig.8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kuroda and Mark et al, such that the operation means includes a pattern code reader means for reading a binary pattern code; and conversion means for converting read signal information read by the pattern code reader means into a signal to be transferred, and the phone main body comprises: decode means for transferring the signal to be transferred converted by the conversion means to the phone main body by the transmission/reception means to decode-process the signal to be transferred as a pattern code signal, to provide a method for easily, speedily, and accurately performing the registration, transmission and ID registration of telephone numbers.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Pub. 2001/0034250 A1, Chadha. Hand-held personal computing device with microdisplay.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley L. Kim whose telephone number is 571-272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WLK

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600